

CLASSIFICATION: SECRET/CONTROL - U.S. OFFICIALS ONLY

## REPORT

## CD NO.

50X1-HUM

DATE DISTR. 12 October 1949

NO. OF PAGES 2

NO. OF ENCLS.  
(LISTED BELOW)

SUPPLEMENT TO  
REPORT NO.

50X1-HUM

THIS IS UNEVALUATED INFORMATION.

50X1-HUM

1. Research on a German-invented guided missile, which used a photoelectric cell to control the steering mechanism, is going on at the Tanvald (Tanwald - 051/G 36) television factory. The Czechs reportedly have improved the weapon since they began to work on it.
2. Demonstrated from 10 to 15 June 1949 before a small group of top-ranking KSC officials, the missile, fired from a small experimental gun, showed that it was capable of hitting an airplane even while the airplane was travelling in spirals and circles. The spectators are reported to have been tremendously impressed by the experiments.
3. Three experiments were made at the demonstration. In the first, the missile, fired at a circling airplane, shot the airplane down on the first round. In the second experiment, the speed of the missile was cut down to 300 km per hour so that the spectators could follow its flight, and it was fired at a plane whose speed was slightly over 300 km per hour. The plane was again shot down with the first round. In the third experiment, the missile, whose speed was cut down as in the second experiment, was fired at a guided aircraft flying in circles and spirals. Responding to the constant change of direction of the aircraft, and always heading towards the target, the missile followed an irregular path until it hit the airplane.
4. The operating principle on which the missile is based is the selenium cell's sensitivity to light. The cell, which is placed in the nose of the missile, tends to remain covered by the image of the target projected upon it at the point of firing. As the target moves out of alignment, the target image is gradually displaced from the cell. As the cell is thus gradually exposed to light, it guides the missile in the direction of the target.

~~SECRET/CONTROL~~ - U.S. OFFICIALS ONLY

STATE	NAVY	X	NSRB	DISTRIBUTION
ARMY	AIR		FBI	

# EVALUATE

CENTRAL INTELLIGENCE AGENCY

- 2 -

50X1-HUM

displacement by means of a steering mechanism, which the cell controls. Thus the missile, at any instant, points directly towards the target, provided it was aimed properly when fired.

5. Two engineers, one Czech and one Russian, conducted the demonstration.

\*   Comment: There appears to be a discrepancy here, since the report seems to be saying that the missile overtakes a target traveling at a rate of speed greater than its own.

50X1-HUM

SECRET/CONTROL - U.S. OFFICIALS ONLY